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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,312	12/06/2001	Katsuaki Isobe	001701.00129	7010

22907 7590 03/01/2002

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WASHINGTON, DC 20001

EXAMINER

LUU, AN T

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 03/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/003,312

Applicant(s)

ISOBE ET AL.

Examiner

An T. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/505,204.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by the Park et al reference (U.S. Patent 5,682,113).

Park et al discloses in figure 4 an apparatus comprising a delay circuit 210 for receiving a first pulse (output of 131); and a logic circuit (NOR gate 220) coupled to the output of the delay circuit and an inverted signal of the first pulse (via inverter 132) as required by claims 1 and 2. It is noted that delay circuit and clocked inverter refer to the same entity as disclosed in drawing and specification of the instant application. Further, the limitations, recited on lines 5-7 of claim 1 and line 2 of claim 2, merely state the result derived from the apparatus.

As to claim 6, the scope of this claim is similar to that of claim 1. Therefore, it is rejected for the same reason set forth above.

3. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by the Isobe et al reference (U.S. Patent 4,933,579).

Isobe et al discloses in figure 4 an apparatus comprising a delay circuit 12 for receiving a first pulse Si; and a logic circuit (NAND gate 14) coupled to the output of the delay circuit and an inverted signal of the first pulse (via inverter 13) as required by claims 1 and 3. It is noted that

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delay circuit and clocked inverter refer to the same entity as disclosed in drawing and specification of the instant application. Further, the limitations, recited on lines 5-7 of claim 1 and line 2 of claim 3, merely state the result derived from the apparatus.

As to claim 6, the scope of this claim is similar to that of claim 1. Therefore, it is rejected for the same reason set forth above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Park et al reference (U.S. Patent 5,682,113) in view of the D'Souza et al reference (U.S. Patent 5,606,270).

Park et al discloses all the claimed invention including a delay circuit comprising series connected inverters. Park et al does not disclose an inverter having a specifically configuration as recited in claim 4 and 5 of the instant application. D'Souza et al discloses in figure 3 an inverting apparatus comprising NMOS and PMOS transistors having different channel widths (i.e. 20 vs. 0.6) and a ratio of the driving capability of the PMOS transistor to that of the NMOS transistor is different from one and the rise time of a pulse signal is different from a decay time of the pulse signal (i.e., 20/0.6 for PMOS and 10/0.6 for NMOS). It would have been obvious to one skilled in the art to replace a generic delay circuit in Park et al with a series-connected inverters each

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having a series-connected PMOS and NMOS transistors as taught by D'Souza. A skilled artisan would have been motivated to combine these arts to reduce current leakage and to improve noise immunity.


*Conclusion*


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 703-308-4922. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

An T. Luu   
February 19, 2002

  
Terry D. Cunningham  
Primary Examiner